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May 12, 2008



Sent via E-Mail and U.S. Mail
Office of Defense Trade Controls Policy
Directorate of Defense Trade Controls ("DDTC")
Attn: Regulatory Change, ITAR Part 121
U.S. Department of State
SA-1, 12th Floor

Washington, DC 20522-0112

Re: Requested Edits to Proposed Amendment to USML Category VIII

Dear Sir/Madam:

Thank you for the opportunity to comment on the proposed amendments to Category VIII of the United States Munitions List ("USML") that DDTC published in the Federal Register on April 11, 2008.

Clarifying the scope of USML subcategory VIII(h) is particularly important to Boeing's commercial aircraft business because, as you know, a number of jurisdictional issues have arisen in recent years that have significantly and adversely affected the manufacture and delivery of Boeing commercial airplanes.

The structure and integrity of commercial aviation and the ability of the aviation industry to comply with U.S. export control laws are dependent upon a clear and common understanding of how Section 17(c) applies in a bifurcated system of export controls. Boeing is, thus, grateful that the Department of State, in coordination with other relevant agencies, has proposed an amendment to address and explain in more detail which items are and are not controlled under USML subcategory VIII(h).

For the proposed amendment to have this effect, however, Boeing believes that a few significant changes are necessary. With this goal in mind, we are pleased to submit for consideration the requested and suggested edits to the proposed amendments that are described below and in the attached red-line. In preparing these requested and suggested changes, we solicited the opinions of a number of industry experts at Boeing Commercial Airplanes, including those in the certification, standards, and supplier management fields. We asked them to make recommendations on wording so that the references in the proposed amendment are clear enough for non-regulatory specialists and consistent with civil aircraft industry terminology and practices.

Our requests and suggestions pertain only to the proposed Note to subcategory VIII(h). We understand that aircraft engine manufacturers have prepared and plan to submit their comments on the proposed amendment to subcategory VIII(b).

Our requested and suggested changes, and the justifications for the proposed edits to the proposed amendments to the Note are listed below in order of their priority and importance to Boeing. Suggestions that are of less significance follow our priority issues in no particular order.

Priority Items

- 1. Under the definition of "standard equipment," the sentence "A part or component is not standard equipment if there are any performance, manufacturing or testing requirements beyond such specifications and standards" needs to be removed in its entirety because civil aircraft parts are routinely tested or manufactured beyond the applicable specification for purely civil purposes, such as (a) confirming that a part certified for use on one part of an aircraft may be used in a more environmentally harsh portion of the aircraft; (b) satisfying longer warranty obligations; (c) "lifeing" the part to see how long it will last; (d) being able, for marketing reasons, to state to potential customers that the part is reliable because it exceeds specifications; (e) confirming, particularly for new parts, that there is a margin of safety beyond the minimum specifications; and (f) verifying that electro-magnetic emissions do not create unwanted effects such as squelch in very high frequency radios. The proposed sentence would take all of these and other similarly purely civilian situations out from consideration of the definition of "standard equipment."
- 2. The introduction to the Note states that the Export Administration Regulations control "any part or component (including propellers) designed exclusively for civil, non military aircraft...." The word "exclusively" should be removed because it erroneously suggests that non-SME parts specifically designed for both military and civilian aircraft referred to in the EAR as "dual-use items" are not subject to the EAR. Although the sentence does not amend the ITAR, readers could be led to believe that DDTC holds a contrary position.
- 3. Under the definition of "standard equipment," the Note refers to "parts or components manufactured in compliance with an established and published industry specification...." Many civil aircraft and civil aircraft parts manufacturers, including Boeing, publish their own specifications for their own products. Such specifications are, thus, not "industry" standards. (The general understanding of the term "industry specification" is that it is not limited to any particular company.) Limiting this definition only to "industry" standards would, thus, effectively undercut the entire rule because



a significant number of civil aircraft parts built to Boeing and other civil aircraft companies' specifications could not be "standard equipment." For that reason, we respectfully request that the sentence be modified to read, "...in compliance with an established and published industry or manufacturer's specification or standard or an established and published government specification or standard...."

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- 4. Also under the definition of "standard equipment," the Note states that "simply testing a part or component to meet a military specification or standard does not in and of itself change the jurisdiction of such part or component unless the item was designed or modified to meet that specification or standard." Boeing believes that the clause "unless the item was designed or modified to meet that specification or standard" needs to be removed because civil aircraft parts are often designed to meet military specifications for purely civilian purposes and without any military application in mind. Military specifications are commonly used as civil aviation industry standards for all the reasons described under Paragraph #1 above. Leaving the proposed clause in would preclude the application of the Note to parts designed or modified for civilian or dual-use purposes if the applicable specification happened to be a mil spec. It also conflicts with the inclusion of "MS" as one of the applicable government specifications referenced in DDTC's proposed examples of specifications that are within the definition of "standard equipment."
- 5. Under the definition of "standard equipment," the sentence "Parts and components that are manufactured and tested to established but unpublished civil aviation industry specifications and standards are also standard equipment" should be changed as follows:
 - The reference to "industry specifications and standards" should be deleted and replaced with "a manufacturer's specifications or standards." This change is necessary because an unpublished specification is, by definition, not an industry standard. Only manufacturers have unpublished, proprietary specifications.
 - Many parts on civil aircraft are manufactured to "standards," which are slightly different than "specifications." Although the terms are often used interchangeably in the aircraft industry, the text should refer to both specifications and "standards."
 - The term "civil aviation" should be removed from the definition to (a) make it consistent with the standard pertaining to published specifications (which is not so limited) and (b) account for the fact that many parts used on civil aircraft are manufactured and tested to

generic parts specifications and standards, which are not necessarily "civil aviation" specifications of standards. For example, a bolt used on a civil aircraft may be tested to a specification for bolts generally and, although used on an aircraft, may not refer to civil aircraft in the specification or standard.

- It is recommended that the word "proprietary" be added as an example of established but unpublished specifications, merely to give the reader a common reference.
- TSO's, Technical Standard Orders, are common FAA-published specifications that provide minimum performance standard for specified materials, parts and appliances used on civil aircraft.
 Because they are so common, they should be added as an example of established published government specifications.
- The examples used to describe what items fall under the definition of "standard equipment, "i.e., "pumps, actuators and generators," could imply that only moderately large items can be "standard equipment." Boeing recommends the addition of an item that would remove that implication, such as "bolts."
- 6. The definition of the word "integral" in the Note needs to be modified in order to remove the implication of the proposed wording that a part or component is "integral" only if it is actually within -- "installed in" -- the aircraft. Such an interpretation would lead to the illogical conclusion that a part or component would be EAR-controlled when inside the civil aircraft but potentially ITAR-controlled when outside the aircraft, such as a spare or when part of the supply chain. Such a reading would also be contrary to the structure of the ITAR which, with one exception, does not determine the jurisdiction status of items based upon whether the item is or is not installed in an end-item. Boeing's recommended language is as follows: "Integral is defined as a part or component that is installed in the aircraft or authorized for installation in the aircraft according to a FAA certification for the aircraft type (e.g., FAA-approved spares and as part of the supply chain)." The Boeing proposed phrase resolves this spares and supply chain issue by limiting the definition of "integral" to those parts authorized for installation in civil aircraft. This wording is consistent with the wording in the FAA regulations at Section 21.31.



Other Items for Consideration

- The introduction to the Note states that the Export Administration Regulations (EAR) control "any part or component...." The EAR, however, uses and defines the term "item" and is not limited in scope to "parts" or "components." For that reason, a reference to "item" should be added to the Note to make the description of what the EAR controls consistent with the wording in the EAR (see EAR sections 734.3 and 772.1). Without this addition, the Note would suggest that the EAR might not control items (other than parts and components) that were specifically designed for dual-use enditems or civil applications.
- In defining the parts and components that are eligible for control under the EAR, the Note excludes Military Commercial Derivative Aircraft. Because "Military Commercial Derivative Aircraft" is not defined in the export control, aviation, or any other law or regulation, readers may not know what this term means. The term is, however, in FAA Order 8110.101, which essentially defines it as civil aircraft procured by the military. For these reasons, Boeing recommends that a reference to Order 8110.101 be made at the end of the sentence.
- With respect to the guidance for determining whether the three criteria for EAR controls have been met, the Note provides examples of parts or components that are not common to both civil and military applications, i.e., "tail hooks, radomes, and low observable rotor blades." A radome is only the structural, weatherproof enclosure used to protect the radar, antenna, and other equipment on the nose of an aircraft. Some radomes are "common to" civilian aircraft and their military derivatives. Only the electronic equipment behind the radome is specifically designed (or not) for military application. Thus, "radome" in this context is not a good example, and we therefore propose a substitute example of something that is not common to military and civilian aircraft but still similar to a radome, which is a "rotodome." A rotodome is on the back of an Airborne Warning and Control System (AWACS) aircraft.
- Finally, Boeing proposes to add three items to the examples used for purposes of determining whether a part or component may be considered as standard equipment and integral to a civil aircraft, i.e., APUs, seats, and flaps. The addition of these examples is important to remove the implication that the amendment applies only to very small civil aircraft parts and components. It applies to all parts and components that fall within the scope of the three-part test, regardless of size.



To assist DDTC in its review of our requests and suggestions, we have attached to this letter a red-line of the proposed changes.

Thank you, again, for giving industry the opportunity to comment on this important and far-reaching regulation. We look forward to publication of the Final Rule and hope that the State Department will continue its dialogue with industry until the regulatory process is complete.

BOEING

Very truly yours,

Kathryn L. Greaney

Attachment

RED-LINE OF PROPOSED AMENDMENT TO USML CATEGORY VIII (73 Fed. Reg. 19780 (April 11, 2008)) FROM THE BOEING COMPANY

May 12, 2008

Sec. 121.1 General. The United States Munitions List.

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Category VIII--Aircraft and Associated Equipment

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(b) Military aircraft engines, except reciprocating engines, specifically designed or modified for the aircraft in paragraph (a) of this category, and all specifically designed military hot section components (i.e., combustion chambers and liners; high pressure turbine blades, vanes, disks and related cooled structure; cooled low pressure turbine blades, vanes, disks and related cooled structure; cooled augmenters; and cooled nozzles) and digital engine controls (e.g., Full Authority Digital Engine Controls (FADEC) and Digital Electronic Engine Controls (DEEC).

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(h) Components, parts, accessories, attachments, and associated equipment (including ground support equipment) specifically designed or modified for the articles in paragraphs (a) through (d) of this category, excluding aircraft tires and propellers used with reciprocating engines.

Note: The Export Administration Regulations (EAR) administered by the Department of Commerce control any part, or component (including propellers), or other item designed exclusively for civil, non-military aircraft (see Sec. 121.3 for the definition of military aircraft) or and civil, non-military aircraft engines.

Also, a non-SME component or part (as defined in Sec. 121.8(b) and (d) of this subchapter) that is not controlled under another category of the USML, that:

- (a) Is standard equipment;
- (b) is covered by a civil aircraft type certificate (including amended type certificates and supplemental type certificates) issued by the Federal Aviation Administration for a civil, non-military aircraft (this expressly excludes military aircraft certified as restricted and any type certification of Military Commercial Derivative Aircraft (as described in FAA Order 8110.101)); and
- (c) is an integral part of such civil aircraft,

is subject to the control of the EAR.

In the case of any part or component designated as SME in this or any other USML category, a determination that such item may be excluded from USML coverage based on the three criteria above always requires a commodity jurisdiction determination by the Department of State under Sec. 120.4 of this subchapter. The only exception to this requirement is where a part or component designated as SME in this category was integral to civil aircraft prior to [effective date of the final rule]. For such a part or component, U.S. exporters are not required to seek a commodity jurisdiction determination from State, unless doubt exists as to whether the item meets the three criteria above (See Sec. 120.3 and Sec. 120.4 of this subchapter).

Also, U.S. exporters are not required to seek a commodity jurisdiction determination from State regarding any non-SME component or part (as defined in Sec. 121.8(b) and (d) of this subchapter) that is not controlled under another category of the USML, unless doubt exists as to whether the item meets the three criteria above (See Sec. 120.3 and Sec. 120.4 of this subchapter).

These commodity jurisdiction determinations will ensure compliance with this section and the criteria of Section 17(c) of the Export Administration Act of 1979. In determining whether the three criteria above have been met, consider whether the same item is common to both civil and military